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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/685,859	10/11/2000	Syuichi Satake	1614.1085	4181

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EXAMINER

HENEGHAN, MATTHEW E

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 05/24/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/685,859

Applicant(s)

SATAKE, SYUICHI

Examiner

Matthew Heneghan

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-12 have been examined.

Priority

2. The instant application claims priority to Japan Patent Application 11-332984, filed 24 November 1999.

Information Disclosure Statement

3. The following Information Disclosure Statement(s) in the instant application has been fully considered:

Paper No. 2, filed 11 October 2000.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: figure 4B, item 45. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

5. The claim for foreign priority in the specification (see p. 17, lines 15-18) should be placed in the first sentence of the specification following the title. See 37 CFR 1.78(a).

6. The disclosure is objected to because of the following informality: The term REGISTRATER on p.9, lines 23 and 36 does not appear in the corresponding drawing. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 3 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Each claim recites the limitation "the other indication information" in the third line. There is insufficient antecedent basis for this limitation in these claims. For purposes of the prior art search, it is being presumed that this refers to "the other index information."

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 2, 4-9, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,764,770 to Schipper et al. (hereinafter "Schipper") and U.S. Patent No. 4,405,829 to Rivest et al. (hereinafter "Rivest").

As per claims 1, 6, and 8, Schipper discloses where position information and the specification (a digest) is encrypted using the RSA process of U.S. Patent No. 4,405,829 (see Schipper, column 8, lines 60-61) for authentication purposes. Only a chosen set of pixels is modified according to some prescribed form, the mark (see column 8, lines 15-33). The information is incorporated (embedded) into the digital image (see column 8, lines 12-14).

Rivest discloses in U.S. Patent No. 4,405,829 a public key cryptosystem. Rivest discloses that in such cryptosystems, a "signed document" may be generated using a process that includes encryption of the signature using the sender's private key; the decryption process for the signature by the recipient includes the use of the sender's public key (see column 3, lines 40-52).

As per claims 2 and 9, a palette may be used having more than one set of index information, including the two colors black and white, in the signature (see column 11, line 57 to column 12, line 12).

As per claims 4, 5, 7, and 11, the image is retrieved by reversing the process (see column 22, lines 50-65).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 3, 10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,764,770 to Schipper et al. and U.S. Patent No. 4,405,829 to Rivest et al. as applied to claims 1, 9, and 11 above, and further in view of U.S. Patent No. 5,668,897 to Stolfo. (hereinafter "Stolfo")

A sequence of numbers (a string) may be used to map the pixels in the signature (see column 12, lines 21-56). Schipper and Rivest do not disclose the coding of the other index information into a field that excludes the mark.

The image verification system disclosed by Stolfo stores two fields, the image (the mark) in one and the remainder (skipping the mark) in the other, in order to create a highly compressed and accurate representation of the image (see abstract).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Schipper and Rivest by having the mark in one field and the remainder in the other, as disclosed by Stolfo, in order to create a highly compressed and accurate representation of the image.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,005,200 to Foscher discloses a system for sending digital signatures in images that includes the use of public keys.

U.S. Patent No. 5,018,196 to Takaragi et al. discloses a system for signing documents using public key-based signatures.

U.S. Patent No. 5,875,249 to Mintzer et al. discloses a system for authentication images using stamps (marks).

U.S. Patent No. 6,298,153 to Oishi discloses a system for using public key signatures with documents.

U.S. Patent No. 6,345,104 to Rhoads discloses a system for watermarking signatures into official documents.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew E. Heneghan, whose telephone number is (703) 305-7727. The examiner can normally be reached on Monday-Thursday from 8:00 AM - 4:00 PM Eastern Time. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse, can be reached on (703) 308-4789.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
P.O. Box 1450
Alexandria, VA 22313-1450

Or faxed to:


(703) 872-9306

Hand-delivered responses should be brought to Crystal Park 2, 2121 Crystal Drive, Arlington, VA 22202, Fourth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

MEH

May 17, 2004


GREGORY MORSE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100